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User Guide for the Survey of Household Spending, 2007

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User information

Symbols

The following standard symbols are used in Statistics Canada publications:

.	not available for any reference period
..	not available for a specific reference period
...	not applicable
0	true zero or a value rounded to zero
0s	value rounded to 0 (zero) where there is a meaningful distinction between true zero and the value that was rounded
p	preliminary
r	revised
x	suppressed to meet the confidentiality requirements of the *Statistics Act*
E	use with caution
F	too unreliable to be published

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User Guide for the Survey of Household Spending, 2007

1 Introduction

This guide presents information of interest to users of data from the 2007 Survey of Household Spending (SHS). It includes definitions of survey terms and variables, and descriptions of survey methodology, data quality and the content of standard data tables. There is also a section describing the various statistics that can be created using expenditure data (e.g., budget share, market share, and aggregate spending).

The survey interviews were conducted from January until March 2008. Information was gathered about the spending habits, dwelling characteristics and household equipment of Canadian households during the reference period. The survey covered private households in the 10 provinces and three territories. In order to reduce response burden for northern households, the SHS is conducted in the north only every second year, starting with 1999.

The 2007 SHS data were collected in a similar manner to the 2006 SHS. Data were collected by personal interview using electronic questionnaires on laptop computers (computer assisted personal interviews, or CAPI) instead of the paper questionnaires used in the 2005 and prior years.

For the 2007 SHS, the reference date for household composition, tenure, dwelling characteristics and household equipment are as of the time of the interview. Spending data are collected for the reference year for all members of the household at the time of the interview. In order to maintain comparability, data from 1997-2005 have been revised to include both full-year and part-year households.

For the 2006 reference year, automatic edits built into the electronic questionnaire replaced the balance edit and regional office editing performed in previous years. For the 2007 reference year balance edit checks were re-instated.

The Survey of Household Spending (first conducted for the 1997 reference year) includes most of the content from the former Family Expenditure Survey and the Household Facilities and Equipment Survey. For more information about the transition from these surveys to the Survey of Household Spending, please contact Client Services (1-888-297-7355 or 613-951-7355; *income@statcan.gc.ca*), Income Statistics Division.

Custom tabulations, including tabulations of revised data from previous survey years, are also available on a cost-recovery basis subject to data quality and confidentiality constraints.

2 Survey methodology

2.1 The survey universe

The 2007 Survey of Household Spending was carried out in private households in Canada's 10 provinces and three territories.[1]

The following groups were excluded from the survey:

- those living on Indian reserves and crown lands (with the exception of the territories);
- official representatives of foreign countries living in Canada and their families;

1 In order to reduce response burden for northern households, the Survey of Household Spending is conducted in the north only for odd-numbered reference years, starting with 1999.

- members of religious and other communal colonies;
- members of the Canadian Forces living in military camps; and
- persons living full time in institutions:for example, inmates of penal institutions and chronic care patients living in hospitals and nursing homes.

The survey covers about 98% of the population in the 10 provinces and three territories.

Similar to the 2006 survey, spending data were collected for every household member at the time of the interview, including those who joined the household in 2007 and 2008 regardless of whether the previous household existed or the person was living alone. Data were not collected for those who left the household in 2007 or 2008.

As a result, an important difference between the 2006-2007 SHS and previous SHS methodology is the elimination of the distinction between "part-year" and "full-year" members and households.

Persons temporarily living away from their families (for example, students at university) were included in the household to avoid double counting.

2.2 Survey content and reference period

Detailed information was collected about household expenditures for consumer goods and services, changes in assets, mortgages and other loans, and annual income. This information was collected for the calendar year 2007 (the survey reference year).

Information was also collected about dwelling characteristics (e.g., type, age and tenure of the dwelling) and household equipment (e.g. appliances, communications equipment, etc.). The reference date for this information was the time of the interview.

Because the Survey of Household Spending is designed principally to provide detailed information on non-food expenditures, only an overall estimate of food expenditure is recorded. Detailed information on food expenditure is provided by the Food Expenditure Survey which was last conducted in 2001. In February 2003, the results were published in **Food Expenditure inCanada, 2001** , Catalogue no. 62-554-X.

2.3 The sample

The sample size for the 2007 Survey of Household Spending was 21,407 eligible households.

The SHS sample was a stratified, multi-stage sample selected from the Labour Force Survey (LFS) sampling frame. Sample selection comprised two main steps: the selection of clusters (small geographic areas) from the LFS frame and the selection of dwellings within these selected clusters. The current LFS sampling frame is based on 2001 Census geography and 2001 Census population counts.[2]

2.4 Data collection

The 2007 Survey of Household Spending was conducted from January to March 2008. Data were collected by computer assisted personal interview (CAPI) using a lap-top personal computer. A copy of this questionnaire is available on the Statistics Canada website.

2 A detailed description of the Labour Force Survey sampling frame can be found in **Methodology of the Canadian Labour Force Survey**,Statistics Canada, Catalogue no. 71-526-X.

2.5 Data processing and quality control

Due to introduction of the new electronic CAPI questionnaire, changes were made to the data processing and quality control steps.

Similar to the 2006 Survey of Household Spending for 2007 SHS, the interviewers recorded the information provided by the respondents using a laptop and performed the initial editing at the same time. For example, the range edit provided a minimum and maximum amount for certain purchases and was triggered if the amount entered by the interviewer was unusual. Other edits indicated inconsistencies in responses, e.g. if the household tenure was "renter" but no rent was paid. In addition to automatic edits built into the electronic questionnaire, a balance edit comparing total revenues, expenses and changes in assets and liabilities performed by the interviewer acted as a check on data quality.

The next stage of editing was done in the head office to verify unusual or high values and inconsistencies, and to correct invalid responses.

If a household indicated that it had an expense but could not provide the amount, these missing responses were imputed using the nearest neighbour method. Statistics Canada's Canadian Census Edit and Imputation System (CANCEIS) were used to insert values from donor records having similar characteristics, chosen specifically to fit the variable. For example, total household income was used for most variables; dwelling type, household size and province were also frequently used.

Tabulation of the 2007 Survey of Household Spending results was completed using a PC/client server-based system. This system provides tools (database querying, searching, and viewing capabilities) for spotting systematic errors.

2.6 Weighting, re-weighting and census historical revision of the Survey of Household Spending

Users should note that the estimates for the SHS reference years 1997 to 2003 have been revised. These revisions were published along with the 2005 survey results in December 2006.

The estimation of population characteristics from a sample survey is based on the idea that each sampled household represents a certain number of other households in addition to itself. These numbers are called the survey weights of the sample. To improve the representativity of the sample, the weights are adjusted so that the estimates from the sample are in line with population totals, or benchmarks, from other independent sources of information that are considered reliable. This is called weight calibration.

SHS uses two sources for calibration. The first source is the Census of Population which provides demographic benchmarks. From 1997 to 2003, SHS used benchmarks derived from the 1996 Census. Beginning with the 2004 reference year, the SHS uses survey weights which take into account new population projections from the 2001 Census. In order to make these estimates comparable over time, the weights for all previous SHS have been revised using the new 2001 Census data.

The second source used for adjusting the survey weights for SHS are T4 data from the Canada Revenue Agency, which ensures that the estimated distribution of earners in the survey matches the one in the Canadian population.

The current calibration strategy is as follows:

– Age

- At the provincial level there are controls for 8 age groups (0 to 6, 7 to 17, 18 to 24, 25 to 34, 35 to 44, 45 to 54, 55 to 64, 65 plus).
- At the CMA level: two age groups (0 to 17, 18 plus)

– There are controls for three size of household categories (one person, two persons, 3+)

– T4 adjustments are made to the weights of the population for income from wages and salaries (0 to 25th percentile, 25th to 50th, 50th to 65th, 65th to 75th, 75th to 95th, 95th to 100th)

Due to their smaller population, only two age groups are used for the three northern territories: number of persons under 18 and number of persons 18 and older. The weights are also calibrated to the totals for one-person households, two-person households and households with three or more persons. Before the historical re-weighting the calibration strategy varied slightly between the territories and between survey years. The northern calibration is now consistent across all three territories and over time.

The weights and calibration strategy were implemented for SHS for the years 1997 and onward resulting in revised estimates of household spending for each year up to 2003. Users of SHS data should take care to make comparisons using the re-weighted data.

3 Data quality

3.1 Sampling errors

Sampling errors occur because inferences about the entire population are based on information obtained from only a sample of the population. The sample design, the variability of the data, and the sample size determine the size of the sampling error. In addition, for a given sample design, different methods of estimation will result in different sampling errors.

The design for the 2007 Survey of Household Spending was a stratified multi-stage sampling scheme. The sampling errors for multi-stage sampling are usually higher than for a simple random sample of the same size. However, the operational advantages outweigh this disadvantage, and the fact that the sample is also stratified improves the precision of estimates.

Data variability is the difference between members of the population with respect to spending on a specific item or the presence of a specific dwelling characteristic or piece of household equipment. In general, the greater these differences are, the larger the sampling error will be. In addition, the larger the sample size, the smaller the sampling error.

3.1.1 Standard error and coefficient of variation

A common measure of sampling error is the standard error (SE). Standard error is the degree of variation in the estimates as a result of selecting one particular sample rather than another of the same size and design. It has been shown that the "true" value of the characteristic of interest lies within a range of +/- 1 standard error of the estimate for 68% of all samples, and +/- 2 standard errors for 95% of all samples.

The coefficient of variation (CV) is the standard error expressed as a percentage of the estimate. It is used to indicate the degree of uncertainty associated with an estimate. For example, if the estimate of the number of households having a given dwelling characteristic is 10,000 households, and the corresponding CV is 5%, then the true value is between 9,500 and 10,500 households, 68% of the time and between 9,000 and 11,000 households, 95% of the time.

Standard errors for the 2007 Survey of Household Spending were estimated using the "bootstrap" method. This method is suitable for variance estimation of non-smooth statistics such as quintiles. For more information on standard errors and coefficients of variation, refer to the Statistics Canada publication, **Methodology of the Canadian Labour Force Survey**, Catalogue no. 71-526-X.

3.1.2 Data suppression

For reliability reasons, estimates with coefficients of variation (CV) greater than 33% are suppressed. Since CVs are not calculated for all estimates, data suppression for the Survey of Household Spending is based on a relationship between the CV and the number of households reporting expenditure on an item. Analysis of past survey results

indicates that CVs usually reach 33% when the number of households reporting an item drops to about 30. Therefore, data are suppressed for spending on items reported by fewer than 30 households.

However, data for suppressed items do contribute to summary level variables. For example, the expenditure for a particular category of clothing might be suppressed but this amount forms part of the total estimate for clothing expenditure.

3.2 Non-sampling errors

Non-sampling errors occur because certain factors make it difficult to obtain accurate responses or responses that retain their accuracy throughout processing. Unlike sampling error, non-sampling error is not readily quantified. Four sources of non-sampling error can be identified:coverage error, response error, non-response error, and processing error.

3.2.1 Coverage error

Coverage error results from inadequate representation of the intended population. This error may occur during sample design or selection, or during data collection and processing.

3.2.2 Response error

Response error may be due to many factors, including faulty design of the questionnaire, interviewers' or respondents' misinterpretation of questions, or respondents' faulty reporting.

Several features of the survey help respondents recall their expenditures as accurately as possible. First, the survey period is the calendar year because it is probably more clearly defined in people's minds than any other period of similar length. Second, expenditure on food can be estimated as either weekly or monthly expenses depending on the respondent's purchasing habits. Third, expenses on smaller items purchased at regular intervals are usually estimated on the basis of amount and frequency of purchase. Purchases of large items (automobiles, for example) are recalled fairly easily, as are expenditures on rent, property taxes, and monthly payments on mortgages. However, even with these items, the accuracy of data depends on the respondent's ability to remember and willingness to consult records.

In the Survey of Household Spending, the difference between receipts and disbursements is calculated as a check on respondents' recall. This important quality control tool involves the balancing of receipts (income and other money received by the household) and disbursements (total expenditure plus the variable Money flows—assets, loans, and other debts) for each questionnaire. If the difference is greater than 30% of the larger of receipts or disbursements, the record is considered unusable and therefore will not be used.

In 2007, in order to reduce respondent's burden, new screening questions were added to the questionnaire for some categories. Since the answers to these questions were 'yes' or 'no', where the response was negative, the interviewer would skip the remaining parts of the question and would go to the next one. This would result in saving time and a shorter interview.

The addition of the screening questions did not change the reporting percentage for most categories. However we have noted that for a few categories, it has resulted in a lower than expected percentage reporting and therefore slightly lower averages for some items under that category. These screening questions will be modified for the 2008 SHS. The following is a list of the categories where the screening questions may have affected the response rate:

- Cooking equipment;
- Microwave ovens;
- Sewing machines, vacuum cleaners;

- Home and workshop tools and equipment;
- Other lawn, garden/and snow removal tools;
- Use of recreational facilities;
- Maps, sheet music and other printed matter;
- Education, (supplies, textbooks, text books for post-secondary, tuition fees for post secondary and other educational services);
- Games of chance.

3.2.3 Non-response error

Non-response error occurs in sample surveys because not all potential respondents provide complete information.

Total non-response occurs when the interviewer is unable to contact the respondent, no member of the household is able to provide information, or the respondent refuses to participate in the survey. Total non-response is handled by adjusting the basic survey weight for responding households to compensate for non-responding households. For the 2007 Survey of Household Spending, the overall response rate of usable questionnaires was 65.1%. See "Table 1" for provincial response rates.

In most cases, partial non-response occurs when the respondent does not understand or misinterprets a question, refuses to answer a question, or is unable to recall the requested information. Imputing missing values compensates for this partial non-response.

The importance of the non-response error is unknown but in general this error is significant when a group of people with particular characteristics in common refuse to cooperate and where those characteristics are important determinants of survey results.

Text table 1
Response rates, 2007

	Eligible households [1]	Non-contacts	Refusals	Unusables [2]	Usables	Response rate [3]
	number					percent
Newfoundland and Labrador	1,776	198	278	49	1,251	70.4
Prince Edward Island	890	94	192	14	590	66.3
Nova Scotia	1,966	311	394	68	1,193	60.7
New Brunswick	1,783	194	250	98	1,241	69.6
Quebec	2,621	297	584	57	1,683	64.2
Ontario	3,110	489	758	119	1,744	56.1
Manitoba	1,960	198	369	71	1,322	67.4
Saskatchewan	1,901	108	375	91	1,327	69.8
Alberta	2,011	244	342	107	1,318	65.5
British Columbia	2,359	234	473	88	1,564	66.3
Yukon	410	86	53	1	270	65.9
Northwest Territories	400	100	31	5	264	66.0
Nunavut	220	34	10	3	173	78.6
Canada	**21,407**	**2,587**	**4,109**	**771**	**13,940**	**65.1**

1. There is no longer distinction between part-year and full-year households.
2. Rejected at the editing stage.
3. Usable/eligible*100

3.2.4 Processing error

Processing errors may occur in any of the data processing stages, for example, during data entry, editing, weighting, and tabulation. See "Data processing and quality control" for a description of the steps taken to reduce processing error.

3.3 The effect of large values

For any sample, estimates can be affected by the presence or absence of extreme values from the population. These extreme values are most likely to arise from positively skewed populations. The nature of the subject matter of the SHS lends itself to such extreme values. Estimates of totals, averages and standard errors may be greatly influenced by the presence or absence of these extremes.

3.4 Comparability over time

Conducted since 1997, the Survey of Household Spending integrates most of the content found in the Family Expenditure Survey and the Household Facilities and Equipment Survey. Many variables from these two surveys are comparable to those in the Survey of Household Spending. However, some differences related to the methodology, to data quality and to definitions must be considered before making comparisons.

For more information, refer to **Note to Former Users of Data from the Family Expenditure Survey** and **Note to Former Users of Data from the Household Facilities and Equipment Survey**, Catalogue no. 62F0026M. Both documents are available free of charge on the Statistics Canada web site (*www.statcan.gc.ca*).

Historical data from the 1997 to the 2003 surveys of household spending have been re-weighted using the weighting methodology described in the section "Weighting". Historical comparisons between data from those surveys and data from recent years of the Survey of Household Spending should generally be made with re-weighted data, although the differences between survey estimates from the old and new methodologies appear to be minimal at a summary level. Certain populations or variables, however, may be more strongly affected.

Starting with the 1997 Survey of Household Spending, "Tenant's maintenance, repair and alterations" and "Insurance premiums" were reduced by the proportion of rent charged to business. This may affect comparisons with data from previous years.

For the 2001 and 2005 reference year, extra questions were included for use in the weighting of the Consumer Price Index. This change may affect some historical comparisons. For example, in 2001 and 2005, questions were added under "Personal care" to collect extra information about hair care products, makeup, fragrances, deodorants and oral hygiene products. As a result of these extra questions, respondents may have given more precise information and the increase in the estimated expenditures for Personal care in those years may have been caused by an improvement in respondent recall. The effect of additional questions on estimates is difficult to quantify. However, in 2002, when the extra questions were removed, the estimate for Personal care spending decreased again. For the 2006 SHS and subsequent years the extra questions of 2005 were retained.

The section of the questionnaire which covers "Repairs and improvements of owned principal residences" was extensively revised in 2004. From 1997 to 2003, this section had three broad questions: "Additions, renovations and other alterations"; "Replacement or new installation of built-in equipment, appliances and fixtures"; and "Repairs and maintenance". Starting with the 2004 Survey of Household Spending, there were fourteen detailed questions and two columns, giving respondents the opportunity to split the costs for each question between "Repairs and maintenance" and "Improvements and alterations".

Beginning with the 2006 SHS, computer assisted personal interviews (CAPI) replaced the previous paper questionnaire. The household members, dwelling characteristics and household facilities and equipment are all as of the time of the interview, instead of as of December 31st as in previous years. Household spending were collected for the reference year for all members of the household as of the time of the interview, eliminating the distinction between part-year and full-year members and households. Since the CANSIM tables prior to 2006 were based on full-year households only, in order to maintain the comparability with prior years, the data for 1997 to 2005 have been revised to include both full-year and part-year.

4 Definitions

4.1 General concepts

4.1.1 Survey universe

The 2007 Survey of Household Spending has two reference periods and therefore two survey universes. Expenditure data are collected for the calendar year 2007. Household members, dwelling characteristics and data about household equipment are collected as of the date of the interview from January until March 2008.

4.1.2 Household

A person or group of persons occupying one dwelling unit is defined as a "household". The number of households, therefore, equals the number of occupied dwellings. Distinction between full-year and part-year has been dropped beginning in the 2006 reference year.

4.1.3 Household member

Household member was a member of the household at the time of the interview.

4.1.4 Reference person

The household member being interviewed chooses which household member should be listed as the reference person after hearing the following definition. "The household reference person is the member of the household mainly responsible for its financial maintenance (e.g., pays the rent, mortgage, property taxes, and electricity). This person can be either male or female. When all members of the household share equally, any member may be shown as the reference person." This person must be a member of the household at the time of the interview.

4.1.5 Reimbursed expenditures

These are excluded from the tabulations (e.g., work-related expenses or expenditures covered by insurance).

4.1.6 Expenses attributable to a business

These are excluded from the tabulations.

4.1.7 Negative expenditures

Certain values (Separate sale of automobiles and trucks, winnings from games of chance, and tax refunds) are presented in the data tables as "negative expenditures" since they represent a flow of money into the household instead of out of it.

4.1.8 Expenditures collected

With some minor exceptions, the survey includes spending on all goods and services **received** in 2007 whether paid for before or after 2007 (such as on an installment plan).

4.1.9 Taxes included

All expenditures include the Goods and Services Tax, provincial retail sales taxes, tips, customs, duties and any other additional charges or taxes.

4.1.10 Gifts

Any expenditure may include gifts given to persons outside the household. Only the value of gifts of clothing is reported separately, as well as being included in the summary clothing category. See also the definition of " Gifts of money and contributions ".

4.1.11 Insurance settlements

Where an insurance settlement was used to repair or replace property, the survey includes only the deductible amount paid for an item.

4.1.12 Trade-ins

Where a trade in is used to lower the price of an item, most commonly a vehicle, the expenditure amount is the total cost after the trade in. Real estate transactions are excepted.

4.2 Household characteristics

4.2.1 Presented in the same order as they appear on data tables

Number of households in sample refers to the number of households used for data estimation, which includes the number of households sampled, minus vacant dwellings, ineligible households, households that interviewers were unable to contact, households that refused to be interviewed, and households whose questionnaires did not pass editing procedures.

Caution should be exercised when making year-to-year comparisons since changes may not be statistically significant. In order to determine whether a change is statistically significant, please refer to the section "Data quality" in the User Guide, where information about sampling error as well as coefficients of variation and how to use them is available. Special caution is necessary when using estimates from small sub-groups (such as certain metropolitan areas) where the sample size is less than 200.

4.2.2 Estimated number of households

The estimated (weighted) number of private households on December 31 st of the reference year. See "Household " under General concepts.

4.2.3 Average household size

This is the average number of people in a household. In this context, household size is defined as the number of persons who were members of the household at the time of the interview.

4.2.4 Average household income before tax

This includes total household income received in the reference year, income from wages and salaries, self-employment, net rentals, interest and dividends, all pensions, workers' compensation and employment insurance benefits, social assistance and income supplements, child tax benefits, goods and services tax credits, harmonized sales tax credits, provincial tax credits and miscellaneous regular income receipts.

4.2.5 Other money receipts

Refers to other receipts not included in income such as cash gifts, inheritance, or life insurance settlements. Winnings from games of chance are also included if they exceed the amount spent on games of chance.

4.2.6 Money flows—assets, loans and other debts

Includes net changes during the reference year (calendar year 2007) in bank balances; money on hand; money owed to the household; money owed by the household; purchase and sale of stocks and bonds, personal property, and real estate; expenditures on home improvements and alterations; and contributions to and withdrawals from registered retirement savings plans.

The Family Expenditure Survey, last conducted in 1996, had a similar variable called Average net change in assets and liabilities. For a complete description of the differences between the two variables, see **Note to Former Users of Data from the Family Expenditure Survey** (Catalogue no. 62F0026M) available free on the Statistics Canada website (*www.statcan.gc.ca*).

4.2.7 Percentage homeowners (at the time of the interview)

The percentage of households living in a dwelling owned (with or without a mortgage) by a member of the household at the time of the interview.

4.2.8 Average age of reference person

Acts as a general age indicator for the household and uses the reference year minus the reference person's year of birth. Prior to 1996, in the Family Expenditure Survey, the age of the husband was used for couple households and the age of the reference person for all other households. See "Reference person" under General Concepts.

4.3 Selected household expenditures

4.3.1 Presented in the same order as they appear on the data tables

All expenditures are total expenses for the reference year.

4.3.2 Total expenditure

Includes Total current consumption, Personal taxes, Personal insurance payments and pension contributions, and Gifts of money and contributions.

Caution should be used when comparing total expenditure to total expenditure from 1996 and earlier. See **Note to Former Users of Data from the Family Expenditure Survey** (Catalogue no. 62F0026M) available free on the Statistics Canada website (*www.statcan.gc.ca*).

4.3.3 Total current consumption

Shows the expenses incurred during the reference year for food, shelter, household operations, household furnishings and equipment, clothing, transportation, health care, personal care, recreation, reading materials, education, tobacco products and alcoholic beverages, games of chance, and a miscellaneous group of items.

Caution should be used when comparing total current consumption to total current consumption from 1996 and earlier. Prior to 1997, expenditures for gifts were not included in total current consumption. Starting in 1997, these expenditures are reported in the appropriate spending category and therefore contribute to total current consumption. See also "Shelter" and "Miscellaneous expenditures".

4.3.4 Food purchased from stores

"Stores" also includes frozen food provisioners, outdoor farmers' markets and stands, and all other non service establishments.

4.3.5 Food purchased from restaurants

"Restaurants" also includes refreshment stands, snack bars, vending machines, mobile canteens, caterers and coffee wagons.

4.3.6 Shelter

Includes expenditures on principal accommodation (either owned or rented) and on other accommodation such as vacation homes or accommodation while travelling.

Expenditure on owned principal accommodation includes regular mortgage payments, if any. This definition of shelter differs from that of the Family Expenditure Survey last conducted in 1996. See **Note to Former Users of Data from the Family Expenditure Survey** (Catalogue no. 62F0026M) available free on the Statistics Canada website (*www.statcan.gc.ca*).

4.3.7 Rent

Refers to the net household expense for rent after adjusting for rebates and for any use of the dwelling for business. No adjustment for partial subletting to non household members is made. Receipts from this activity are considered part of household income.

4.3.8 Tenants' insurance/Homeowners' insurance

The premiums paid in 2007 for fire and comprehensive policies. Premiums covering more than the reference year were not prorated.

4.3.9 Repairs and maintenance (owned living quarters)

Covers expenditures for labour and materials for all types of repairs and maintenance. This variable includes expenditures to repair and maintain built-in equipment, appliances and fixtures. Money spent on alterations and improvements is considered to contribute to an increase in assets and is included in Money flows—assets, loans and other debts.

An annual data series from 1987 to 2002 (with the exception of 2000) showing household expenditures on repairs and renovations is available from the Homeowner Repair and Renovation Survey (HRRS). However, this survey was cancelled permanently in 2003. The HRRS had been an annual source of detailed estimates of repairs and renovations expenses. See **Homeowner Repair and Renovation Expenditure**, Catalogue no. 62-201-X and **Estimating homeowners' expenses on repairs and renovations:recent changes in approach**, Catalogue no. 62F0026M.

4.3.10 Property taxes and sewage charges

Refers to the amount billed, excluding any rebates. Special service charges (e.g., garbage, sewage), local improvements, and water charges are included if these are part of the property tax bill. Property taxes that are included in condominium charges are excluded.

4.3.11 Electricity

Respondents sometimes report household electricity payments together with their water and sewage payments. This affects estimates of average household expenditure and percentage reporting for "Electricity" and "Water and sewage". The summary category "Water, fuel and electricity" is unaffected.

4.3.12 Traveler accommodation

Excludes accommodation that was part of a travel tour (which is included in Package travel tours).

4.3.13 Household appliances

Refers to the net purchase price after deducting trade-in allowance and any discount. This variable excludes appliances included in the purchase of a home and built-in appliances. Expenditures for the purchase and installation of built-in household equipment, appliances and fixtures (e.g., built-in appliances and wall-to-wall-carpeting) are included with home improvements and alterations.

4.3.14 Purchase of automobiles and trucks

Refers to the net purchase price, including extra equipment, accessories, and warranties bought when the vehicle was purchased, after deducting any trade-in allowance or separate sales. (Separate sales occur when a vehicle is sold independently by the owner, e.g., not traded in when purchasing or leasing another vehicle.)

4.3.15 Health care

Includes direct (out-of-pocket) costs and expenditures on insurance premiums. The distinction between premiums for private health insurance plans and publicly funded (provincial) plans is not always clear to respondents. Interviewers are trained to assist, but the variations in coverage and administration among the various provincial health care regimes makes this a difficult task. For this reason, more confidence can be placed in the overall estimate for Health insurance premiums than in the components: Public hospital, medical and drug plans and Private health insurance plans.

4.3.16 Package travel tours

This includes at least two components such as transportation and accommodation, or accommodation with food and beverages.

4.3.17 Tobacco and smokers' supplies

This includes cigarettes, tobacco, cigars, matches, pipes, lighters, ashtrays, cigarette papers and tubes, etc.

4.3.18 Alcoholic beverages

This includes those purchased from stores and restaurants. Also included are expenditures on supplies and fees for self-made beer, wine or liquor. Purchases of alcoholic beverages may be under-reported.

4.3.19 Games of chance (net)

Equal the sum of expenditures on all types of games of chance minus the sum of winnings from all types of games of chance. If total winnings are greater than total expenditures, the amount to be subtracted from expenditures is set to $1 less than the expenditures and the value of the remaining winnings is moved to the variable " Other money receipts ".

4.3.20 Miscellaneous expenditures

Expenses on other owned property (not principal accommodation or vacation home), legal services not related to dwellings, financial services, dues to unions and professional associations, contributions and dues for social clubs and other organizations, forfeits of deposits, fines, money lost or stolen, the purchase of tools and equipment for work, and other miscellaneous goods and services.

Caution should be used when comparing current data for Miscellaneous expenditures to data from the Family Expenditure Survey (1996 or earlier). For a complete description of the differences between the two variables, see **Note to Former Users of Data from the Family Expenditure Survey** (62F0026MIE2000002) available free on the Statistics Canada website (*www.statcan.gc.ca*).

4.3.21 Personal taxes

Income taxes paid in the reference year on both the reference year and previous years' incomes plus other personal taxes (e.g., gift taxes, Newfoundland and Labrador school tax) minus income tax refunds received in the reference year. Tax credits, such as child tax benefits, goods and services tax credits and provincial tax credits, are included in Average household income before taxes.

4.3.22 Personal insurance payments and pension contributions

Payments for life insurance, annuities, employment insurance, public and private pension plans, and similar items. For certain uses of the data, some of these items might be regarded as savings, although the relationship between the expenditure and any increase in savings may not be easily determined. This category of expenditure was called Security prior to the 1996 survey. (Registered retirement savings plan (RRSP) contributions are included in Money flows—assets, loans and other debts.)

4.3.23 Gifts of money and contributions

This includes money and support payments given to persons outside the household or to charity. This does not include money spent on gifts to persons outside the household as was the case in the Family Expenditure Survey.

4.4 Dwelling characteristics

Dwelling characteristics are collected as of the date of the interview.

4.4.1 Type of dwelling

This describes the type of dwelling in which the household resided at the time of interview. A dwelling is a structurally separate set of living premises with a private entrance from outside the building or from a common hall or stairway.

- A **single detached** dwelling contains only one dwelling unit and is completely separated by open space on all sides from any other structure, except its own garage or shed.
- A **single attached** dwelling is a double or semi-detached unit (side-by-side) or a row or terrace unit.
- The classification **apartment** includes duplexes (two dwellings, situated one above the other), triplexes, quadruplexes or apartment buildings.
- **Other** dwellings include mobile homes, motor homes, tents, railroad cars or houseboats, which are used as permanent residences and are capable of being moved on short notice.

4.4.2 Repairs needed

This variable indicates the respondent's perception of the repairs the dwelling needed at the time of the interview to restore it to its original condition. Remodelling, additions, conversions, or energy improvements that would upgrade the dwelling over and above its original condition are not included.

- **Major repairs** include serious deficiencies in the structural condition of the dwelling, as well as the plumbing, electrical and heating systems. Examples include corroded pipes, damaged electrical wiring, sagging floors, bulging walls, damp walls and ceilings, and crumbling foundation.
- **Minor repairs** include deficiencies in the surface or covering materials of the dwelling and less serious deficiencies in the plumbing, electrical and heating systems. Examples include small cracks in interior walls and ceilings, broken light fixtures and switches, cracked or broken panes, leaking sinks, missing shingles or siding, and peeling paint.

- **Regular maintenance** includes painting, fixing leaking faucets, clogged gutters or eavestroughs, etc.

4.4.3 Tenure

This variable gives the housing status of the household at the time of the interview. Note that housing tenure for expenditures refers to the entire reference year. See "Housing tenure" under Classification categories for standard tables.

- **Owned with mortgage** indicates that the dwelling was owned by a household member and that there was a mortgage at the time of the interview.

- **Owned without mortgage** indicates that the dwelling was owned by a household member and that there was no mortgage at the time of the interview.

- **Rented** indicates that the dwelling was rented by the household for the entire reference year or occupied rent-free at the time of the interview.

- **Mixed tenure** includes those households that both owned and rented during the reference year. Used in expenditure tables only.

4.4.4 Year of move

Refers to the year the household moved into the dwelling. If the dwelling was occupied by previous generations, the first year of residence for the household member who has occupied the dwelling the longest is recorded.

4.4.5 Period of construction (for dwelling occupied at the time of the interview)

This gives the year or period in which the original building was constructed.

4.4.6 Number of rooms (for dwelling occupied at the time of the interview)

This includes the kitchen, bedrooms, and finished rooms in the attic or basement. It excludes bathrooms, halls, vestibules and rooms used solely for business purposes.

4.4.7 Number of bathrooms (for dwelling occupied at the time of the interview)

This indicates the number of rooms in the dwelling with an installed bathtub and/or shower.

4.4.8 Principal heating equipment (for dwelling occupied at the time of the interview)

This indicates the type of heating equipment chiefly used to heat the dwelling in winter.

- **Steam or hot water systems** distribute central heating through radiators located throughout the house and connected by pressure pipes.

- **Hot air furnaces** distribute central heating by a motor-driven fan through vents located throughout the dwelling. (This is the most common central heating system.)Furnaces with a pump are included in this category.

- **Heating stoves** are localized heating units with no central distribution system to other parts of the house (e.g., oil space heater, gas space heater, wood stoves).

- **Electric heating** includes permanently installed baseboard electric heating and other types such as floor or ceiling heating wires in all or most rooms.

- **Other** heating includes cookstoves and any other type of heating equipment not listed above.

4.4.9 Age of principal heating equipment installed (for dwelling occupied at the time of the interview)

This indicates how long ago the principal heating equipment was installed.

4.4.10 Principal heating fuel (for dwelling occupied at the time of the interview)

Refers to the winter fuel used in the principal heating equipment (e.g., oil or other liquid fuel, natural gas, propane, electricity, wood or other fuels).

4.4.11 Principal heating fuel for hot water (for dwelling occupied at the time of the interview)

Indicates the type of fuel used for the running hot water supply (e.g., oil or other liquid fuel, natural gas, propane, electricity or other fuels such as wood).

4.4.12 Principal cooking fuel (for dwelling occupied at the time of the interview)

Indicates the main fuel for the range or stove on which the household does most of the cooking (e.g., natural gas, propane, electricity or other cooking fuels). "Other" includes oil or other liquid fuel and wood.

4.5 Household equipment

In general, appliances and equipment are included if they are in working order or will soon be repaired, and are located within the dwelling occupied at the time of the interview. They must be owned or leased for the exclusive use of the household.

4.5.1 Washing machine

Washing machines located outside the dwelling and shared with other households are excluded.

4.5.2 Clothes dryer

Dryers may be electric or gas. Clothes dryers located outside the dwelling and shared with other households are excluded.

4.5.3 Dishwasher

Dishwashers may be built-in or portable.

4.5.4 Freezer

A freezer is an individual piece of equipment and not part of a refrigeration unit such as the freezer in a refrigerator.

4.5.5 Air conditioner

A central air conditioner is designed to cool the air in the entire building and may be located either inside or outside the dwelling unit, for example, in the basement of an apartment block. A window-type air conditioner is installed in a window or through a wall to cool the air in a room.

4.5.6 Telephone (includes business use)

Telephones used for business are included if the business is conducted in the dwelling. Cordless phones are included. Cellular telephones are excluded.

4.5.7 Cellular telephone

Handheld text messaging devices with cell phone capability are included. Cordless phones are excluded.

4.5.8 Compact disc player

A compact disc player may be a separate unit, part of a component or built in (as in a receiver/cassette recorder/compact disc combination unit).

4.5.9 Video cassette recorder

Video cassette recorders (VCRs) are units which play videocassettes when attached to a television or monitor.

4.5.10 Home computer

Computers used exclusively for business purposes are not included.

4.5.11 Internet use from home

This indicates whether the household accesses the Internet via a computer in the house. It also includes cases where a home computer is used to link to a business computer located outside the dwelling for access to the Internet. Excluded are cases where the Internet is accessed directly through a computer located outside the dwelling (e.g., work).

4.5.12 Type of Internet connection

"Other type of connection" includes telephone line connected to a television and wireless (e.g., cellular telephone, personal digital appliance).

4.5.13 Owned vehicles

Gives the number of vehicles (car, van/mini-van, truck/sport utility vehicle) owned by members of the household on December 31st completely or partially for private use, excluding those leased.

4.5.14 Owned automobiles

Gives the number of automobiles owned by members of the household on December 31st completely or partially for private use, excluding those leased.

4.5.15 Owned vans or trucks

Gives the number of vans, minivans, trucks and sport utility vehicles owned by members of the household on December 31st completely or partially for private use, excluding those leased.

4.6 Classification categories of standard tables

4.6.1 Canada

In 1998, 1999, and every second year thereafter starting with 2001, statistics for Canada include the territories. For the other years, Canada-level statistics include the 10 provinces only.

4.6.2 Province/territory

Refers to the major political divisions of Canada. Data for territories are available for 1997 (coverage insufficient for inclusion in Canada-level statistics), 1998, 1999 and every second year thereafter starting with 2001.

4.6.3 Metropolitan areas

The overall concept for delineating metropolitan areas is one of a large urban area together with adjacent urban and rural areas that have a high degree of social and economic integration with this urban area (See the **2001 Census Dictionary** , p. 208, Catalogue no. 92-378-X.)

For the Survey of Household Spending, data are tabulated based on the 2001 census metropolitan area (CMA) boundaries. In the Survey of Household Spending, only data for the Ontario part of the Ottawa-Gatineau CMA (Ottawa) are tabulated for the metropolitan area. The data for the Quebec part (Gatineau) are included in the data tabulated for the province of Quebec and Canada.

The metropolitan areas for which the data are tabulated are:St. John's, Charlottetown-Summerside, Halifax, Saint John, Québec, Montréal, Ottawa, Toronto, Winnipeg, Regina, Saskatoon, Calgary, Edmonton, Vancouver and Victoria.

4.6.4 Income

Readers requiring official income statistics are .directed to the publication **Income in Canada** , Catalogue no. 75-202.[3]

4.6.5 Household income quintiles

Income groupings obtained by ranking households in ascending order of total household income and partitioning the households into five groups such that the estimated number of households in each group is the same.

In a quintile table, the number of households in the sample for "All classes" can be up to four households higher than the actual number of households in the sample. This is because a sampled household which falls on the threshold between two quintiles, represents a number of households, some of which would be allocated to the lower quintile and some to the higher so it is assigned to both quintiles. Since there are four thresholds between quintiles, the number of households in the sample for All classes in a quintile table may increase by up to four.

4.6.6 Housing tenure

Whether a household member owned, rented, or both owned and rented (Mixed tenure) the dwelling(s) in which the household lived during the reference year. See also " Tenure " under Dwelling characteristics.

- **All owners** refers to households living for the entire reference year in a dwelling owned (with or without mortgage) by a household member. See also "Percentage homeowners (at the time of the interview)" under Household characteristics.
- **Owners without mortgage** owned the dwelling for the entire reference year and had no mortgage at the time of the interview.
- **Owners with mortgage** owned the dwelling for the entire reference year and had a mortgage at the time of the interview.
- **Renters** rented a dwelling for the entire reference year (as a regular tenant, rent free, or with reduced rent).

3 Traditionally, the Survey of Consumer Finances (SCF) had been the source of Statistics Canada's annual income estimates. Starting with data for the 1998 reference year, the Survey of Labour and Income Dynamics (SLID) became the major source of annual cross-sectional income estimates, in addition to producing longitudinal income data.

– **Mixed tenure** includesthose households that both owned and rented during the reference year.

4.6.7 Household type

Households are divided into the following types:

– **One person households** are the householdswhere the dwelling is occupied by only one person.

– **Couple households** are households where the married or common law spouse of the reference person was a member of the household at the time of the interview. This household type may be further broken down into couple households without children (without additional persons), with children (without additional persons), and with additional persons. "Children" are never-married sons, daughters, or foster children of the reference person and may be any age. "Additional persons" include sons, daughters and foster children whose marital status is other than "single, never-married", other relatives by birth or marriage, and unrelated persons.

– **Lone-parent households** are households where no spouse of the reference person is present and there is at least one child (never-married son, daughter, or foster child of the reference person). The lone-parent households for which data are presented in this publication do not include any additional persons.

– **Other households** may be broken down into households composed of relatives only and households having at least one household member who is unrelated to the reference person (e.g., lodger, roommate, employee). Relatives may include:

- person whose marital status is other than single, never-married;
- relatives of the reference person by birth or marriage (not spouse, son, daughter, or foster child);
- spouse of the reference person who was not present in the household at the time of the interview.

4.6.8 Size of area of residence

Sampled dwellings are assigned to the following groups depending on the 2001 population size (according to the 2001 census boundaries) of the metropolitan area, municipality, or area in which they are located.

– Urban

- 1,000,000 and over
- 500,000 to 999,999
- 250,000 to 499,999
- 100,000 to 249,999
- 30,000 to 99,999
- under 30,000

– Rural

4.6.9 Urban area

For the Survey of Household Spending (based on the LFS sampling frame), urban areas include:

– all large metropolitan areas (even though they do contain some rural areas);

– most small metropolitan areas (also called census agglomerations). In some cases, where a census agglomeration contains a large rural population, only the urban portion is considered urban;

- urban areas based on the census definition:"Urban areas have minimum population concentrations of 1,000 and a population density of at least 400 per square kilometre, based on the previous census population counts."

4.6.10 Rural area

All territory outside urban areas is considered rural. Taken together, urban and rural areas cover all of Canada .

4.7 Statistics presented in the standard tables

4.7.1 Average expenditure per household

This is equal to the estimated total expenditures of all households divided by the estimated number of households. The average is based on all households in a column, including households that reported a zero value.

4.7.2 Percentage reporting

The percentage of households that reported purchasing an item. These percentages cannot be added together to form sub-totals.

4.7.3 Average expenditure per household reporting

This is calculated for those households that reported the expenditure, i.e., without zero values. Average expenditure per household reporting was calculated using unrounded data. Note also that expenditures in this column do not add to sub-totals.

4.7.4 Percentage of total expenditure

This is calculated by expressing the average expenditure per household as a percentage of total expenditure. This statistic is also known as "budget share".

4.7.5 Median expenditure per household

Expenditure groupings are obtained by ranking households in ascending order of the expenditure on a given item and partitioning the households into two groups such that the estimated number of households in each group is the same. The expenditure reported by the highest ranked case in the first group would be the median. Estimates for individual expenditure items in a given column of a table do not add up to the sub-totals or totals. Households reporting zero expenditures are included.

4.7.6 Median expenditure per household reporting

Expenditure groupings are obtained by ranking households in ascending order of the expenditure on a given item and partitioning the households into two groups such that the estimated number of households in each group is the same. The expenditure reported by the highest ranked case in the first group would be the median. Estimates for individual expenditure items in a given column of a table do not add up to the sub-totals or totals. Households reporting zero expenditures are **not** included.

5 The relationship between expenditure estimates from the Survey of Household Spending and the System of National Accounts

Users should note some important differences between estimates of total current consumption from the Survey of Household Spending (SHS) and personal expenditure on consumer goods and services from the System of National

Accounts (SNA). Data from the SHS are an important, but by no means the only, source of data used by the SNA in the compilation of their accounts.

Current expenditure estimates for both the SHS and the SNA cover all personal outlays on goods and services by Canadian residents at home and abroad. In addition, personal expenditure on consumer goods and services from the SNA includes the operating expenditure of "associations of individuals", which include private non profit organizations such as charitable institutions, labour unions, private pension funds, mutual funds, mutual insurance companies and similar non-commercial groups serving households. These organizations are regarded as groups of persons acting collectively for the benefit of the community.

Estimates from the National Accounts include expenditures made in the northern territories. SHS estimates include data for the north only for years when the survey is conducted there. The SHS has included northern data in its Canada totals for 1997, 1998, 1999, 2001, 2003, 2005 and 2007.

Data on the expenditures of persons living alone who died, emigrated, or were institutionalized during the survey year are excluded from the SHS but are included in the National Accounts. Unlike the SHS, the National Accounts include data for Canadian residents based overseas, such as diplomats and military personnel.

The SHS presents information about the purchase of both new and used goods. In the National Accounts, personal expenditure includes spending on new goods, but for used goods previously owned by the personal sector, only the mark-up is included.

Several expenditures that are not directly incurred by household members are assigned imputed values in the National Accounts. For example, National Accounts assigns imputed values for the following: the cost of farm products consumed directly in farm households and the cost of items received by employees in lieu of wages.

An imputation is also made for household expenditure on the financial intermediation services of banks and other financial institutions for which no explicit charges are recorded, e.g., the portion of bank interest charges that represent administration costs.

In the SHS, shelter expenditures for homeowners include items such as property taxes, homeowners' insurance, regular mortgage payments, utilities, and spending on maintenance and repairs. In the National Accounts, personal spending on shelter for homeowners is determined by imputing a rental value for their dwellings.

Total current consumption in the SHS and total personal expenditure in the National Accounts cover mainly the same categories of goods and services. However, total current consumption in the SHS includes some items that are classified as transfer payments and excluded from total personal expenditure in the National Accounts, such as vehicle license fees, public medical insurance premiums and the transfer portion of interest on consumer debt.

The SHS is able to provide detailed annual expenditure data not only at the national and provincial/territorial level, but also for various metropolitan areas, income groups, and types of households. The SNA provides annual and quarterly data at the national level and annual data at the provincial/territorial level.

6 How to use expenditure data tables

This section explains the calculations used most frequently to manipulate expenditure data from the Survey of Household Spending. Users are strongly advised to refer to this section before doing their own data analysis.

Expenditure data given in the tables are estimates based on the total sample, that is, on households that reported buying an item and those that did not. Data on percentage reporting are provided in the tables so that users can derive estimates of both the number of households reporting a purchase and the average expenditure of households that reported buying an item.

6.1 How to calculate the number of households reporting a purchase

Refer to the "Example data" table.

To estimate the number of households reporting a purchase, multiply the estimated number of households at the top of the column by the percentage of households reporting and then divide by 100.

For example, to find the number of households in the lowest income group that had pet expenditures:

$$\frac{\text{Estimated \# of households x Percentage reporting pet expenditures}}{100}$$

(1)

$$\text{Example: } \frac{463{,}590 \times 29.4}{100} = 136{,}295$$

6.2 How to calculate the average expenditure per household reporting a purchase

Refer to the "Example data" table.

To calculate the average expenditure per household reporting the purchase of an item, divide the average household expenditure on that item by the corresponding percentage reporting and then multiply by 100.

For example, to find the average expenditure on pets by households that actually had pet expenses:

$$\frac{\text{Average household expenditure on pet expenses x 100}}{\text{Percentage reporting}}$$

(2)

$$\text{Example: } \frac{\$239 \times 100}{47.6} = \$502$$

6.3 How to calculate average expenditure per person.

Refer to the "Example data" table.

To calculate the average expenditure per person on an item, divide the average expenditure per household for that item by the household size found near the top of the column.

For example, to find the average expenditure per person for food by those households in the lowest income group:

$$\frac{\text{Average expenditure per household for food}}{\text{Household size}}$$

(3)

$$\text{Example: } \frac{\$2{,}474}{1.29} = \$1{,}918$$

When comparing estimates of per person expenditure, note that family composition (number of children and adults) is also a factor in many expenditure patterns.

6.4 How to calculate percentage of total average expenditure per household (budget share)

Refer to the "Example data" table.

To calculate the percentage of total average household expenditure represented by an item (budget share), divide the average expenditure per household for an item by total expenditure for all items and multiply by 100.

For example, to find the percentage of total expenditures represented by food purchases for households in the lowest income group:

$$\frac{\text{Average expenditure per household for food} \times 100}{\text{Total average expenditure per household}} \quad \textbf{(4)}$$

$$\text{Example:} \quad \frac{\$2{,}474 \times 100}{\$12{,}311} = 20.1\%$$

6.5 How to combine expenditure items into your own groupings

Refer to the "Example data" table.

The average expenditure per household for different items in a column can be added together to make new subtotals. (But do not add the "percentage reporting" values for different items.)

For example, to find the average expenditure per household in the lowest income group on food, shelter and clothing:

Average expenditure on food + clothing + shelter (lowest income group)

Example:$2,474 + $427 + $4,426 = $7,327

6.6 How to combine columns of data

Refer to the "Example data" table.

Columns are combined by using the estimated number of households at the top of each column to calculate the weighted average of the values in the columns. To calculate the average expenditure across several columns, multiply the estimated number of households by the average expenditure for an item for each of the columns being combined. Sum the results. Then divide this total by the sum of the estimated number of households.

For example, to find the average expenditure on food for households in the lowest three income groups:

$$\frac{\begin{array}{c}(\text{Estimated \# of households in lowest income group} \times \text{average expenditure on food}) + \\ (\text{Estimated \# of households in next income group} \times \text{average expenditure on food}) + \\ (\text{Estimated \# of households in next income group} \times \text{average expenditure on food})\end{array}}{\begin{array}{c}\text{Estimated \# of households in lowest income group} + \\ \text{Estimated \# of households in next income group} + \\ \text{Estimated \# of households in next income group}\end{array}} \quad \textbf{(5)}$$

$$\text{Example:} \quad \frac{(463{,}590 \times \$2{,}474) + (882{,}370 \times \$2{,}881) + (797{,}740 \times \$3{,}518)}{463{,}590 + 882{,}370 + 797{,}740} = \$3{,}030$$

6.7 How to calculate total expenditure on an item for all households or a sub group of households

Refer to the "Example data" table.

To calculate how much was spent on average on an item for all households or households in a particular sub-group (e.g., households in the lowest income group), multiply average expenditure per household for an item by the estimated number of households at the top of the column.

For example, to find how much was spent on food by all households in the lowest income group:

Average expenditure per lowest income household for food x estimated number of households

Example: $2,474 x 463,590 = $1,146,921,660

Note that this aggregate is based on a sample that excludes households ineligible for the survey.

6.8 How to calculate percentage of total expenditure for all households (market share)

Refer to the "Example data"table.

Expenditure share, or market share, is the percentage of the total expenditure for an item that can be attributed to a particular sub group of households, e.g., the percentage of all clothing expenditures made by households in the lowest income group. It is calculated by dividing the total expenditure on an item for a given sub group of households (to calculate, see above) by the total expenditure on the item for all households and then multiplying by 100. For example, to find the percentage of all expenditures on food made by households in the lowest income group:

$$\frac{\text{Average expenditure per lowest income households on food x Estimated \# of households in lowest income group}}{\text{Average expenditure for all households on food x Estimated \# of households for all classes}} \times 100$$

(6)

$$\text{Example: } \frac{\$2,474 \times 463,590}{\$5,960 \times 10,900,500} = 1.77\%$$

Text table 2
Summary average household expenditure by household income group

	Household income group							
	All classes		Under $10,000		$10,000 to $14,999		$15,000 to $19,999	
	number	average	number	average	number	average	number	average
Household size	10,900,500	2.61	463590	1.29	882,370	1.52	797,740	1.94
	thousands of dollars	percentage	thousands of dollars	percentage	thousands of dollars	percentage	thousands of dollars	percentage
Average household expenditure								
Food	5,960	100.0	2,474	100.0	2,881	100.0	3,518	100.0
Shelter	8,477	99.9	4,426	99.3	5,051	99.5	5,833	99.9
Pet expenses	239	47.6	67	29.4	70	27.2	122	38.2
Clothing	2,115	99.0	427	92.0	615	96.1	840	98.2
Total expenditure	**49,068**	**100.0**	**12,311**	**100.0**	**15,036**	**100.0**	**20,143**	**100.0**

Note(s): These data do not come from the current year's survey.

6.8.1 Approximation of coefficient of variation

It is possible to approximate the coefficient of variation (CV) of estimates not represented in the standard tables using a relationship between the CV and the number of households that reported spending on an item or having a given dwelling characteristic.Previous studies have shown that the CV of the estimate of an item tends to decrease in proportion to the square root of the number of households having a given dwelling characteristic.

As an example, let's assume that the estimated CV for the average household expenditure on rented living quarters for all households in Ontario is 4.61%.To estimate the CV for the average household expenditure on rented living quarters in Toronto, use the following equation.Note that this method provides only an approximation of the CV.

CV for average expenditures on rented living quarters by households in Toronto:

$$\text{CV (for all hhlds)} \times \sqrt{\frac{\#\text{ of hhlds reporting in Ontario}}{\#\text{ of hhlds reporting in Toronto}}}$$

(7)

$$= 4.12\% \times \sqrt{(768 / 358)}$$
$$= 4.12\% \times 1.46$$
$$= 6.02\%$$

where number of households reporting expenditure on rented living quarters in Ontario

$$= \frac{\text{Ontario sample x percentage reporting}}{100}$$

(8)

$$= \frac{2{,}156 \times 35.6}{100}$$
$$= 768$$

and where number of households reporting expenditure on rented living quarters in Toronto

$$= \frac{\text{Toronto sample x percentage reporting (Toronto)}}{100}$$

(9)

$$= \frac{902 \times 39.7}{100}$$
$$= 358$$

Note: Where it is necessary to calculate a CV for a sub-population at the Canada level (e.g., lone-parent households) the CV for Canada should be used.

Note 2: These data do not come from the current year's survey.

7 Related products and services

7.1 Detailed tables

The following standard tables are also available:

62F0031X	Detailed Average Household Expenditure for Canada, Provinces/Territories and Selected Metropolitan Areas
62F0032X	Detailed Average Household Expenditure by Household Income Quintile for Canada and Provinces
62F0033X	Detailed Average Household Expenditure by Housing Tenure for Canada
62F0034X	Detailed Average Household Expenditure by Household Type for Canada
62F0035X	Detailed average household expenditure by size of area of residence for Canada
62F0041X	Dwelling Characteristics and Household Equipment for Canada, Provinces/Territories and Selected Metropolitan Areas
62F0042X	Dwelling Characteristics and Household Equipment by Income Quintile for Canada
62F0043X	Dwelling Characteristics and Household Equipment by Housing Tenure for Canada
62F0044X	Dwelling Characteristics and Household Equipment by Household Type for Canada
62F0045X	Dwelling Characteristics and Household Equipment by Size of Area of Residence for Canada

7.1.1 Household expenditures research paper series

This series provides detailed documentation on issues, concepts, methodology, data quality and other relevant research related to household expenditures from the Survey of Household Spending.

62F0026M Household expenditures research paper series

7.1.2 CANSIM

CANSIM (the Canadian Socio-Economic Information Management System) is a data base consisting of multi-dimensional cross-sectional tables.

Twenty tables are available. They present annual information from the Survey of Household Spending about the spending habits, dwelling characteristics and household equipment of Canadian households by province/territory and selected metropolitan areas. These tables cover the survey years 1997 to 2007.

Table 203-0001 presents summary level expenditure data, while tables 203-0002 to 203-0018 present detailed expenditures. Tables 203-0019 and 203-0020 have household facilities and equipment data.

7.1.3 Custom tabulations

For clients with more specialized data needs, custom tabulations can be produced on a cost-recovery basis. Custom tabulations can be produced to your specifications on a contract basis (subject to confidentiality restrictions). Aggregate data at the detailed expenditure level (including both full-year and part-year households) are also available on a custom basis.